UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/091,016	03/05/2002	Barry E. Duggan	72184	6797

27975 7590 01/30/2006

ALLEN, DYER, DOPPELT, MILBRATH & GILCHRIST P.A.
1401 CITRUS CENTER 255 SOUTH ORANGE AVENUE
P.O. BOX 3791
ORLANDO, FL 32802-3791

EXAMINER	
DYKE, KERRI M	

ART UNIT	PAPER NUMBER
2667	

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/091,016	DUGGAN, BARRY E.	
	Examiner	Art Unit	
	Kerri M. Dyke	2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 March 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 8, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 4, 8, and 12 contain the limitation wherein the first transceiver communicates only with the first transceiver. This contradicts claims 1, 5, and 9 that state the first transceiver communicates with the second transceiver. It is believed by the examiner that the claim should read wherein the first transceiver communicates only with the second transceiver. Examination of the claims is based upon this presumed correction.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takahashi et al. (US 6,731,632) in view of Okamoto (US 6,950,433).

4. In regards to claim 1, Takahasi discloses for use with a data communication network having a first transceiver (figure 1.10) at a host site that communicates over a communication channel (figure 1.C0) with a second transceiver at remote site (1.20), said remote having a plurality of network element devices coupled with said second transceiver (1.30-1,-2,-3), a

method of enabling a network management device coupled with said host site to conduct management communications with any of said plurality of network element devices at said remote site, said method comprising the steps of:

a. providing a single destination address-based management communication protocol that supports identification and routing of management messages to only a single destination address, and having a command message structure that includes an intentionally unused information field; Figures 7-10 disclose the use of TL1. TL1 is a protocol like the one described.

b. assembling a management message, that is to be coupled to said first transceiver for transmission over said communication channel to said remote site, in accordance with said management communication protocol provided in step (a), and containing a target address identifier field that specifies a selected one of said plurality of network element devices; The inherent structure of an indirectly routed message using TL1 is for the TID of the destination element to be included in the TID field of the header.

c. modifying the management message assembled in step (a), so as to derive a reformatted management message in which said target address identifier field specifies said second transceiver, and a different field contains information identifying said selected one of said plurality of network element devices at said remote site; Figure 2A and column 7 lines 49-51 disclose that the address of the second transceiver is used in the TID field and the address for the network element is placed elsewhere.

d. coupling said reformatted management message derived in step (c) to said first transceiver, for transmission over said communication channel to said second transceiver

at said remote site; and Column 6 lines 28-30 discloses that the message is sent from the first transceiver to the second transceiver.

e. receiving said reformatted management message at said second transceiver at said remote site and forwarding said reformatted management message therefrom to said selected one of said plurality of network element devices at said remote site. Column 6 lines 41-43 discloses setting up a connection and sending the message to the destination network element device.

Takahashi does not disclose placing the address information of the destination network element device into an unused portion of the header.

Okamoto discloses in figure 2 including the address information of the destination device in an unused portion of the header.

It would have been obvious to one of ordinary skill in the art to place the element device address information into an unused portion of the header ,as taught by Okamoto, instead of placing it in the body, as taught by Takahashi, because doing so would conserve network resources, as taught by Okamoto in column 3 lines 45-50. Packet latency is lowered because an address search does not need to be performed. The cost of the system is lowered because high-speed address conversion equipment is not needed.

5. In regards to claim 2, Takahashi and Okamoto disclose the method according to claim 1, wherein step (e) comprises examining said reformatted management message for the presence of information in said intentionally unused information field and, in response to detecting information in said intentionally unused information field, changing the contents of said target address identifier field of said reformatted message in accordance with said information in said

intentionally unused information field, so as to produce a further reformatted message, and forwarding said further reformatted message to a network element device whose address is contained in the target address identifier field of said further reformatted message. Figure 3A and column 8 lines 32-34 disclose that the message is reformatted by the second transceiver upon detection of the information. The reformatted message is then sent to the destination network device.

6. In regards to claim 3, Takahashi and Okamoto disclose the method according to claim 1, wherein said management communication protocol corresponds to Transaction Language 1 (TL1) protocol (figures 7-10), and said intentionally unused information field corresponds to a <GENERAL BLOCK> field of the command structure thereof. The intentionally unused field is inherently the <GENERAL BLOCK> field, because that is the only intentionally unused field. The TID field may be null in return messages, but in the method of claim 1, the message is not a return message. All other fields must be used.

7. In regards to claim 4, Takahashi and Okamoto disclose the method according to claim 1, wherein said first transceiver is operative to transmit messages over said communication channel to only said first transceiver as a valid single destination address, using said single destination address-based management communication protocol. Takahashi does not disclose wherein said first transceiver comprises an add-drop multiplexer.

Takahashi discloses using Ethernet on the physical link in figure 7, but does not disclose what material makes up the physical link. The TL1 protocol was developed to be used in conjunction with an optical medium. Its use inherently implies the physical link is made of fiber. If the link were fiber, the first transceiver would inherently be an add-drop multiplexer.

It would have been obvious to one of ordinary skill in the art to use fiber as the physical link material because fiber provides higher bandwidth, can span longer distances, and experiences virtually no cross-talk, among other well known advantages over traditional copper wiring.

8. Claim 5 is almost identical to claim 1. The difference occurs in the preamble, which is not necessarily accorded patentable weight, with the addition of the word only in order to signify that the first transceiver can only communicate with the second transceiver. Limitation (a) of claim 1 is also added to the preamble and the limitations of claim 5 are re-lettered accordingly. Figure 1 of Takahashi discloses a point-to-point connection between the two transceivers. This means that the first transceiver can only communicate with the second transceiver. The remainder of claim 5 is rejected upon the same basis as claim 1.

9. Claim 9 is rejected upon the same basis as claim 1.

10. Claims 6 and 10 are rejected upon the same basis as claim 2.

11. Claims 7 and 11 are rejected upon the same basis as claim 3.

12. Claims 8 and 12 are rejected upon the same basis as claim 4.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited patents provide methods for facilitating the communication of a first transceiver with a remote device where the remote device cannot be directly addressed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Dyke whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Friday, 8:00 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kmd

CHI PHAM
SUPERVISORY PATENT EXAMINER

1/25/06